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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,766	09/30/2003	Thomas Albert	700706.90211	4465

7590 05/31/2005  
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EXAMINER

GOLDBERG, JEANINE ANNE

ART UNIT PAPER NUMBER

1634

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/674,766

**Applicant(s)**

ALBERT ET AL.

**Examiner**

Jeanine A. Goldberg

**Art Unit**

1634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 6-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This action is in response to the papers filed April 11, 2005. Currently, claims 1-12 are pending. Claims 1-5 have been withdrawn as drawn to non-elected subject matter.

### ***Election/Restrictions***

2. Applicant's election with traverse of Group I (Claims 1-5) in Paper filed April 11, 2005 is acknowledged.

The response asserts that claims of Groups I-II will inevitably involve a search of subject matter of all the other claims. This argument has been thoroughly reviewed, but is not found persuasive because the claims are separately classified. Further, the microarray product claims do not require synthesis using the claimed method or use using the claimed method of Group III. As was previously noted, in the event that the products become allowable, rejoinder according to the guidelines will be considered.

Claims 6-12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement.

The requirement is still deemed proper and is therefore made FINAL.

This application contains claims 6-12 drawn to an invention nonelected with traverse. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

***Priority***

3. This application claims priority to provisional application 60/415,046, filed October 1, 2002.

***Drawings***

4. The drawings are acceptable.

***Claim Rejections - 35 USC § 112- Second Paragraph***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 4-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A) Claim 4 and 5 are indefinite over the recitation "the two oligonucleotides" and "the two probes" because Claim 1 does not refer to "the two oligonucleotides" and "the two probes." Therefore, these recitations lack proper antecedent basis.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-3, 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Adams et al. (US Pat. 5,641,658, June 24, 1997).

Adams et al. (herein referred to as Adams) teaches a method for performing amplification of nucleic acid with two primers bound to a single solid support. Figure 2A-2D illustrates an array comprising a plurality of features (namely 121 and 123) formed of single stranded oligonucleotides. The features (namely 121 and 123) include (i.e. comprise) in the same feature more than one sequence (namely 125 and 127)(limitations of Claims 1, 2, 5). The areas (i.e. features) each contain a probe set comprising a second and third nucleic acid (col. 10, lines 15-20). Adams teaches amplification between the two nucleic acids. Therefore, the nucleic acids are attached at both the 5' and 3' ends (limitations of Claims 3). Since Adams teaches every limitation of the instant claims, Adams anticipates the claimed invention.

7. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Bao et al. (US Pat. 6,251,601, June 2001).

Bao teaches simultaneous measurement of gene expression and genomic abnormalities using nucleic acid microarrays. The microarray of Bao is comprised of

spots with genomic DNA from 31 human putative amplified gene loci, one spot of total human genomic DNA, three control spots of pooled genomic DNA, each spot a pool of equal amounts of genomic DNA for ten of these oncogene loci, and one spot of lambda phage DNA (col. 26, lines 40-46). The microarray thus comprises several features (i.e. nearly 35 features). The features include more than one sequence (i.e. genomic DNA or 10 oncogene loci). Therefore, Bao teaches every limitation of the instant claims.

8. Claims 1-2, 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Gentalen et al. (US Pat. 6,306,643, October 23, 2001).

Gentalen teaches a method of using an array of pooled probes in genetic analysis. The invention provides arrays of polynucleotide probes having at least one pooled position. Gentalen illustrates an array comprising two probes with two polymorphisms and each of the 4 possible alleles for the two polymorphisms. The "paired array" therefore has 16 features with two probes. The resulting array contained 16 sites, each with a different combination of N1 and N2 in the two probes (col. 5, lines 35-40)(limitations of Claims 1-2). Gentalen teaches that the nonoverlapping sequences include first and second polymorphic sites and the first and second probes are respectively complementary to polymorphic forms of the first and second polymorphic sites (col. 2, lines 50-60). Gentalen teaches that multiple cells in the array contain different pooled mixtures of probes which are useful for analyzing targets that can have multiple combinations of segments (col. 9, lines 35-45). Therefore, Gentalen teaches an array comprising features with pooled nucleic acids at particular positions.

9. Claims 1-2, 4-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Shah (US Pat. 6,808,886, October 26, 2004).

Shah teaches methods for array-based comparative binding assays. Shah teaches that each array can comprise a calibration spot, wherein the calibration spot comprises a biological molecule from each spot on an array (col. 6, lines 55-65). The at least one calibration spot comprises at least one copy of a sequence from each test spot on the array. Shah teaches an array having 100 spots that represent the sequences of substantially a complete chromosome or a known subset of a chromosome or an entire genome. The 101<sup>st</sup> spot, a calibration spot has at least one sample of nucleic acid from each of the 100 test spots (col. 24, lines 50-65). Since Shah teaches every limitation of the instant claims, Shah anticipates the claimed invention.

### ***Conclusion***

**10. No claims allowable over the art.**

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Jeanine Goldberg whose telephone number is (571) 272-0743. The examiner can normally be reached Monday-Friday from 7:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones, can be reached on (571) 272- 0745.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The Central Fax Number for official correspondence is (571) 273-8300.

A handwritten signature in black ink, appearing to read "J. Goldberg". The signature is fluid and cursive, with the first letter "J" being particularly large and stylized.

**Jeanine Goldberg**

**Primary Examiner**

May 26, 2005